

BULK RECEPTION UNLOADER

COAL - LIMESTONE - GYPSUM - FGD - BIO FUELS
ALTERNATIVE FUELS

Material Feeder concept to satisfy the demands of clients requiring a mobile solution to receive general bulk materials such as Coal, Aggregates and Alternative Fuels direct from tipping trucks.

- ▶ No deep pits
- ▶ No underground hoppers
- ▶ No expensive civil works
- ▶ Flexibility of location
- ▶ One piece integrated machine
- ▶ Receives direct from trucks
- ▶ Receives direct from shovels
- ▶ Controlled rate feeding
- ▶ Handles dry and dusty materials
- ▶ Easy maintenance
- ▶ Handles wet and sticky materials
- ▶ Reduced dust generation
- ▶ No risk of bridging or blockage
- ▶ Reduced energy consumption
- ▶ Fast truck discharge
- ▶ Easy housekeeping access
- ▶ Reliable in service
- ▶ Proven reference worldwide



The unit is designed to be flexible and is available for use with a wide size range of Bulk Tipper Trucks, walking floor trucks and other unloading vehicles.

DESIGNED AND BUILT IN THE UNITED KINGDOM 

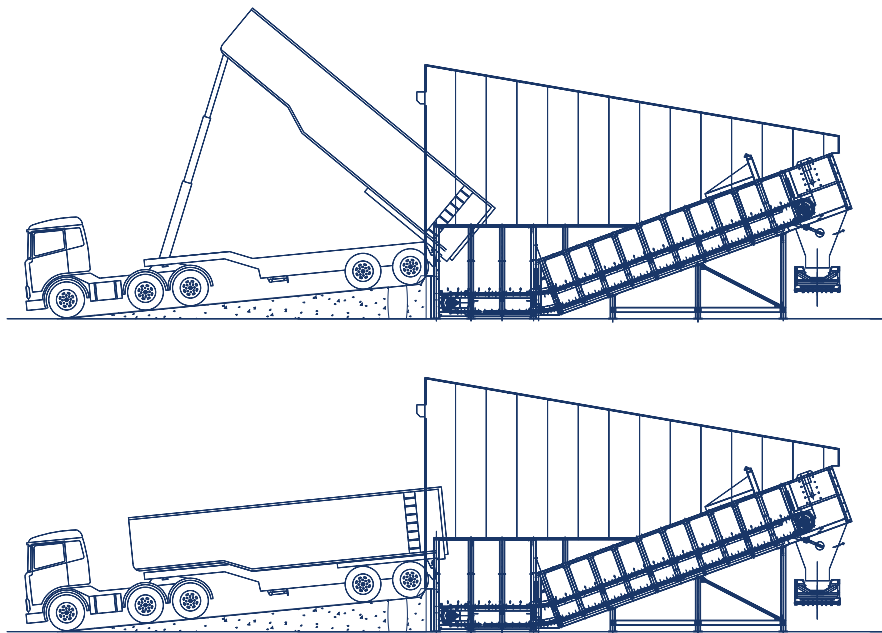
BULK RECEPTION UNLOADER

The Don Valley Engineering Ltd. Bulk Reception Unloader can hold up to three truck loads of material on the Belts Apron, creating additional storage capacity. The unit can be fully open for non dusty material or totally enclosed and fitted with a dust exhaust and ventilation system, ATEX approved and designed for use with hazardous material like Wood Pellets and Bio-Mass fuels. The front of the unit can be fitted with a steel roller shutter door providing authorised safe access and a fully enclosed system. To the rear safe access to the drive stations and head drum for maintenance provides easy access.

If more than one Bulk Reception Unloader is being used to receive different materials. The use of a traffic management system eliminates the risk of the wrong material being discharged into the wrong Bulk Reception Unloader by means of the use of an RDF card scanner and traffic light system.

The wide Apron-Belt design permits a very low loading height which allows the trucks to discharge direct to the entry section with only a small access ramp.

The wide Apron-Belt design combines the strength of a Steel Apron Feeder with the cleanliness of a Belt Feeder. Since the material depth is less than the belt width, the bridging and blockages associated with conventional tapered hoppers is completely eliminated guaranteeing reliable discharge.



- ▶ The discharge of the Bulk Reception Unloader interfaces with existing Plant Belt Conveyors or with other mechanical transfer systems.
- ▶ The BRU drive unit is powered by a variable speed electric drive motor and gearbox or by means of a Hydraulic Power Pack with Flow Control Valve.
- ▶ Sensors located within the operating areas of the unit detect material build up and prevent system failures.
- ▶ Levelling gate trims the height of the bed depth on the belt preventing fall back as the material rises up the inclined section providing a controlled method of feeding.

- ▶ The truck arrives and discharges its material onto the Forward Moving Bulk Reception Feeder.
- ▶ The belt moves forward so the material is drawn from the body of the truck.
- ▶ This is then fed to the discharge point at the top of the Feeder.
- ▶ When the truck is empty it departs the Bulk Reception Unloading Station.
- ▶ The material is contained within the feeder unit and is continually discharged to the following transfer system.
- ▶ As the material moves forward the empty section is exposed.
- ▶ After the first truck has departed the following truck reverses into position.
- ▶ During this time period the Forward Moving Apron Belt has exposed the entry section ready to accept the next trucks contents.
- ▶ This process is continued until the trucks stops delivering material.



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